

RTIP ID#: RIV070308 and 35641

TCWG Consideration Date: September 25, 2018

Project Description *(clearly describe project)*

The Riverside County Transportation Commission (RCTC), in cooperation with Caltrans District 8, proposes to construct improvements at the existing interchange at State Route 91 (SR-91) and State Route 71 (SR-71). The improvements include constructing a new direct flyover connector from eastbound SR-91 to northbound SR-71 and adding roadway improvements on eastbound SR-91 between the Green River Road Interchange with SR-91 and the SR-91/SR-71 Interchange. Several Alternatives were studied primarily, and after evaluation of the environmental impacts, one viable Build Alternative was identified as having the least impacts to the environmentally sensitive area while meeting the objectives of the Project. As a result, a No Build Alternative and one Build Alternative were considered for full environmental analysis.

Build Alternative

The main components of project Build Alternative include:

- Replace the existing loop ramp from eastbound (EB) SR-91 to northbound (NB) SR-71 with a new direct flyover connector, which include two 12-foot lanes and 10-foot shoulders. In addition, the flyover structure would carry an outside auxiliary lane extending along the connector from the Green River Road onramp. The flyover connector ramp will begin on eastbound SR 91, east of the existing Green River Road interchange, and will span SR-91, the Santa Ana River, and the southbound lanes of SR-71. The two lanes of the eastbound to northbound flyover connector will form the inside two lanes of northbound SR-71. The proposed two-lane westbound SR-91 to northbound SR-71 connector will merge to a single lane and join northbound SR-71 as an outside auxiliary lane for a short distance before merging to a two-lane facility.
- Reconstruction and realignment of Green River Road onramp, to accommodate the new flyover connector ramp. The Green River Road onramp to eastbound SR-91 will be realigned as a two-lane onramp which will span over the Burlington Northern Santa Fe (BNSF) Railway parallel to the West Prado Overhead Bridge (Bridge No. 56-0634). The inside lane of the ramp will continue as a slip ramp to the SR-91/SR-71 flyover, joining the connector as an auxiliary lane before merging into the two-lane section on the flyover structure. The outside lane of the Green River onramp will diverge to the right from the main ramp alignment and braid under the SR-91/SR-71 flyover as it meets with the eastbound SR-91 mainline. Ramp metering may be installed on this ramp prior to the point where it merges with eastbound SR-91. The Fresno Canyon Wash Bridge (E91-N71 Connector UC; Bridge No. 56-0635) will be widened to accommodate the realigned ramp and shoulder
- Realignment of southbound (SB) SR-71 to the west, to allow adequate spacing for the SR-91/SR-71 flyover to touch down and form the inside lanes of northbound SR-71. The approximate limits of realignment of the existing southbound SR-71 lanes will be from Station 334+00, the northern end of the SR-71 Santa Ana River Bridge (Bridge No. 56-0379), to Station 364+00 at the north end of the realignment. The existing eastbound SR-91 to northbound SR-71 loop connector will be closed to traffic and pavement on this segment may be removed.

The main project features will be constructed mostly within existing Caltrans right-of-way (ROW). Construction of the Build Alternative will take approximately two years (500 working days), in five distinct and consecutive stages. The anticipated start is early 2020.

Background

On April 28, 2009, the TCQG determined that the project is not a project of air quality concern (POAQC). On May 2011, the FHWA concurred with the Air Quality Conformity Analysis conducted for the project finding that the "SR 91/71 Interchange Improvement project conforms to the State Implementation Plan (SIP) in accordance with 40 C.F.R. Part 93."

In June 2011, an Initial Study and Mitigated Negative Declaration was approved in support of the SR-71/SR-91 Interchange Improvement Project's compliance to the California Environmental Quality Act of 1970 (CEQA). Also, in June 2011, a 23 U.S.C. 327 Non-Categorical Exclusion was approved in support

of the project's compliance to the National Environmental Policy Act of 1969 (NEPA).

During the PS&E Phase of the project several design changes were incorporated into the project design. These changes include:

1. USACE/Sukut Driveway Right of Way (ROW) Relinquishment: The existing easement will be relinquished by Caltrans to USACE and a new access easement will be obtained by Sukut.
2. ROW Requirements: Temporary Construction Easements (TCE) and Permanent Access/Maintenance/Aerial Easements: During the PS&E phase of the project, the area required to construct the project has increased. Temporary and permanent easements located along SR-91 adjacent to Prado Road/Burlington Northern Santa Fe (BNSF) ROW and hillside slope areas west of SR-71 occur outside of the previous environmentally cleared area. TCEs increased by 0.842 acres; permanent easements have decreased by 2.628 acres; and ROW requirements have increased by 2.179 acres.
3. Elimination of PCL-1 Drainage Improvements & Update to Mitigation Measure BIO-18: This change is proposed to eliminate drainage improvements proposed during the PA/ED phase of the project associated with MSHCP Proposed Constrained Linkage (PCL-1). BIO-18 has been revised to eliminate conditions associated with PCL-1.
4. Culvert Extension: This change would extend an existing 36-inch reinforced concrete pipe (RCP) drainage (#36a) crossing SR-91 an additional 35 feet beyond what was analyzed during the PA/ED phase.
5. Bat Mitigation: Mitigation measure BIO-29 was revised to include specific bat mitigation measures.
6. Elimination of Access to USACE Property: To accommodate the flyover structure proposed, an access road to USACE-managed land would need to be vacated.
7. SR-91 Undercrossing Improvements: The project is conditioned to remove the existing concrete revetment and re-grade the existing 2:1 slope to a flatter slope of 4:1.
8. SR-91 CIP Tie-in with SR-91/71 Interchange and Construction along Eastbound SR-91: An additional sliver shoulder widening of approximately 6 feet to meet the minimum shoulder width requirements is required.
9. Relocation of SCE utility OH at BNSF ROW/Prado Road and New Utility Pole along Green River Road: A portion of the relocated OH electrical line and installation of an electrical utility pole occur outside of the environmentally cleared area that was approved during the PA/ED phase.
10. Contradiction of Construction Window Regarding Migratory Bird Treaty Act (MBTA) and Mitigation Measures BIO-31 and BIO-32: The nest season dates were revised in the mitigation measures to reflect the CDFW defined nesting season.
11. Change Mitigation Bank to Riverside-Corona Resource Conservation District (RCRCD) for Mitigation Measure BIO-34: Mitigation Measure BIO-34 was updated to indicate specific mitigation.
12. Relocation of SCE OH Telephone Utility Crossing SR-71: Two portions of the relocated OH line occurs outside of the environmentally cleared area approved during the PA/ED phase.
13. Reduction of Grading along SR-71 and Easement Requirements at Chino Hills State Park (CHSP): Implementing rounded slopes requires a reduction in permanent slope easement acreage of 1.381. The reduction in grading would decrease the amount of public quasi-public lands (PQP) affected by the project by 0.217 acres or permanent impacts and 2.243 acres of temporary impacts.
14. Revised Stormwater Treatment BMP at Existing Sr-91/71 Loop Interchange: The previously proposed infiltration basin is to be replaced with a detention basin at the same location within the SR-91/71 interchange loop.

On November 17, 2014, a CEQA/NEPA Revalidation was completed to address the design changes listed above which were different in design of the previously approved SR-71/SR-91 Interchange Improvement Project.

The project schedule has been delayed due to changes in funding availability.

Today, no additional design changes to the project are being proposed since 2014. However, now that more than three years has passed since the last Revalidation was approved, a new CEQA/NEPA revalidation will be prepared to confirm the project continues to meet conformity requirements.

Type of Project (use Table 1 on instruction sheet)

In 2009, the Type of Project was identified as Interchange Replacement. However, today, Interchange replacement is not an option on Table 1 and the description of Reconfigure Existing Interchange more accurately reflects the type of project.

County:

Riverside

Narrative Location/Route & Postmiles:

At SR-91/71 junction; replace EB SR-91 to NB SR-71 connector with a direct flyover; widen SB SR-71 to EB SR-91 connector from 1 to 2 lanes, construct EB collector - distributor system (2 & 3 lanes - Green River Road to SR 91/71 JCT), construct EB & WB Auxiliary lane (SERFAS to JCT 71), construct EB general purpose lane (JCT SR-71 to SERFAS Club Drive) and widen SERFAS Club Drive Interchange EB exit from 1 to 2 lanes & WB entry from 1 to 3 lanes.

The project limits along SR-71: PM 1.9 (south) to PM R3.0 (north); and along SR-91: PM R0.9 (west) to PM R3.0 (east).

Caltrans Projects – EA# 0F5411

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Hot Spot Pollutant of Concern (check one or both) **PM2.5** ☒ **PM10** ☒

Federal Action for which Project-Level PM Conformity is Needed (check appropriate box)

Categorical Exclusion (NEPA)	EA or Draft EIS	FONSI or Final EIS	PS&E or Construction	<input checked="" type="checkbox"/> Other (Revalidation)
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Scheduled Date of Federal Action:

NEPA Assignment – Project Type (check appropriate box)

Exempt	Section 326 – Categorical Exemption	<input checked="" type="checkbox"/> Section 327 – Non-Categorical Exemption
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Current Programming Dates (as appropriate)

	PE/Environmental	ENG	ROW	CON
Start	Present	Present	Present	July 2020
End	December 2019	February 2020	February 2020	December 2022

Project Purpose and Need (Summary): (attach additional sheets as necessary)

The purpose of the project has not change since 2009 and includes the following objectives:

- Improve travel times for commuters on SR-91 and SR-71 by removing the unacceptable level of traffic service at the existing interchange;
- Increase capacity of the interchange to accommodate the planned growth in the area and minimize traffic conflicts at the interchange.

Currently, the existing eastbound SR-91 to northbound SR-71 connector consists of a single lane, tight loop ramp which passes under the SR-91/SR-71 separation to join the westbound SR-91 to northbound SR-71 connector. Additionally, the southbound SR-71 to eastbound SR-91 connector passes under the SR-91/SR-71 separation bridge as a single lane ramp, paralleling the eastbound SR-91 to northbound SR-71 connector. The existing westbound SR-91 to northbound SR-71 connector diverges from SR-91 as a two-lane ramp and merges to a single lane prior to joining the single lane eastbound SR-91 to

northbound SR-71 connector, forming the two-lane northbound SR-71 expressway. The existing southbound SR-71 is currently two lanes. At the SR-91 interchange one southbound SR-71 lane becomes the SR-91 eastbound on-ramp and the other southbound SR-71 becomes the SR-91 westbound on-ramp.

Surrounding Land Use/Traffic Generators (*especially effect on diesel traffic*)

Existing land uses directly adjacent to the project corridor have not changed since 2009 include the following:

- North of SR-91: on the western end of the project corridor limit, to the east and west of Green River Road ramps, there are residential uses. Further east, on the west of SR-71, the land is undeveloped, while east of SR-71, the land consists of Prado Dam flood control area (U. S. Army Corps flood control land).
- South of SR-91: at the western limit, immediately south of eastbound SR-91 there is an open space. The BNSF Railway crosses SR-91 east of Green River Road and for the most part runs parallel to SR-91, until it crosses SR-91 just east of the project eastern limit. Further south of the project corridor, along top of the hills, the land use is primarily residential. Existing and projected commuter traffic, are the primary traffic generators in the project vicinity and surrounding area.

Opening Year (2022) Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Table 1a. Roadway Segment LOS Data for Opening Year 2022 – Build and No Build

Roadway	Segment	Peak Hour LOS (AM/PM)		
		2022 No Build	2022 Build	
Freeway Mainline				
Eastbound SR-91:				
Eastbound SR-91	Under Green River Road Overcrossing	HOV/HOT	A/C	B/C
		GP	C/C	C/D
	Between Green River Road On-Ramp and SR-71 Northbound Off-Ramp	HOV/HOT	A/C	-
		GP	B/C	-
	Between SR-71 Northbound Off-Ramp and Green River Road On-Ramp	HOV/HOT	-	B/C
		GP	-	C/D
	Upstream of On-Ramp from SR-71 Southbound	HOV/HOT	A/C	B/C
		GP	C/C	C/C
Northbound SR-71:				
North of SR-91 Westbound On-Ramp		GP	C/D	C/D
Southbound SR-71				
North of SR-91 Westbound Off-Ramp		GP	C/D	C/D
Ramps				
Eastbound SR-91 Off-Ramp to Green River Road			A/B	A/B
Eastbound SR-91 On-Ramp from Green River Road			A/A	-
Eastbound SR-91 On-Ramp/Northbound SR-71 On-Ramp from Green River Road			-	A/A
Eastbound SR-91 Off-Ramp to Northbound SR-71			B/F	A/B
Westbound SR-91 Off-Ramp to Northbound SR-71 On-Ramp			B/C	B/C
Westbound SR-91 Off-Ramp to Green River Road			A/A	A/A
Westbound SR-91 On-Ramp from Green River Road			D/A	E/A

Table 1b. Opening Year Traffic Volumes and Truck percentages – Build and No Build

Roadway Segment	Lane Type or Direction	AADT - All		% Change	Truck AADT (%Truck)		%Change in Truck AADT ^b
		No Build	Build		No Build	Build	
Freeway Mainline							
Eastbound SR-91							
Under Green River Road Overcrossing	HOV/HOT	31,372	34,032	8.5	0 (0)	0 (0)	0.0
	GP	101,641	107,915	6.2	7,115 (7)	7,554 (7)	6.2
Between Green River Road On-Ramp and SR-71 Northbound Off-Ramp	HOV/HOT	31,372	- ^a	N/A	0 (0)	- ^a	N/A
	GP	105,917	- ^a	N/A	7,414 (7)	- ^a	N/A
Between SR-71 Northbound Off-Ramp and Green River Road On-Ramp	HOV/HOT	- ^a	34,032	N/A	- ^a	0 (0)	N/A
	GP	- ^a	90,364	N/A	- ^a	6,325 (7)	N/A
Upstream of On-Ramp from SR-71 Southbound	HOV/HOT	31,372	34,032	8.5	0 (0)	0 (0)	N/A
	GP	86,714	91,813	5.9	6,070 (7)	6,427 (7)	5.9
Northbound SR-71:							
North of SR-91 Westbound On-Ramp	GP	47,197	49,916	5.8	3,304 (7)	3,494 (7)	5.8
Southbound SR-71:							
North of SR-91 Westbound Off-Ramp	GP	45,718	47,695	4.3	3,200 (7)	3,339 (7)	4.3
Ramps							
Eastbound SR-91 Off-Ramp to Green River Road		14,927	16,102	7.9	1,045 (7)	1,127 (7)	7.9
Eastbound SR-91 On-Ramp from Green River Road		4,276	- ^a	N/A	299 (7)	- ^a	N/A
Eastbound SR-91 On-Ramp/Northbound SR-71 On-Ramp from Green River Road		- ^a	7,004	N/A	- ^a	490 (7)	N/A
Eastbound SR-91 Off-Ramp to Northbound SR-71		16,162	17,551	8.6	1,131 (7)	1,229 (7)	8.6
Westbound SR-91 Off-Ramp to Northbound SR-71 On-Ramp		29,839	31,833	6.7	2,089 (7)	2,228 (7)	6.7
Westbound SR-91 Off-Ramp to Green River Road		5,015	6,004	19.7	351 (7)	420 (7)	19.7
Westbound SR-91 On-Ramp from Green River Road		15,430	15,651	1.4	1,080 (7)	1,096 (7)	1.4
a. Proposed new or replaced ramp. b. Truck percentages remain unchanged for Build and No Build scenarios. GP – general purpose lane; HOV/HOT – high occupancy vehicle lane/high occupancy toll lane; N/A – not applicable Source: Parsons 2010 Traffic Study; May 2018 traffic counts in the area; and PeMS 2018 data							

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility**Table 2a. Roadway Segment Traffic Data for RTP Horizon Year 2045 – Build and No Build**

Roadway	Segment		Peak Hour LOS (AM/PM)	
			2045 No Build	2045 Build
Freeway Mainline				
Eastbound SR-91:				
Eastbound SR-91	Under Green River Road Overcrossing	HOV/HOT	B/D	B/E
		GP	B/D	C/D
	Between Green River Road On-Ramp and SR-71 Northbound Off-Ramp	HOV/HOT	B/D	-
		GP	B/D	-
	Between SR-71 Northbound Off-Ramp and Green River Road On-Ramp	HOV/HOT	-	B/E
		GP	-	C/D
	Upstream of On-Ramp from SR-71 Southbound	HOV/HOT	B/D	B/E
		GP	B/C	B/C
Northbound SR-71:				
North of SR-91 Westbound On-Ramp		GP	C/C	C/C
Southbound SR-71				
North of SR-91 Westbound Off-Ramp		GP	B/C	B/C
Ramps				
Eastbound SR-91 Off-Ramp to Green River Road			A/C	A/C
Eastbound SR-91 On-Ramp from Green River Road			A/A	-
Eastbound SR-91 On-Ramp/Northbound SR-71 On-Ramp from Green River Road			-	A/A
Eastbound SR-91 Off-Ramp to Northbound SR-71			C/F	A/B
Westbound SR-91 Off-Ramp to Northbound SR-71 On-Ramp			C/C	C/C
Westbound SR-91 Off-Ramp to Green River Road			A/A	A/A
Westbound SR-91 On-Ramp from Green River Road			F/B	F/C

Table 2b. Horizon Year Traffic Volumes and Truck percentages – Build and No Build

Roadway Segment	Lane Type or Direction	AADT - All		% Change	Truck AADT (%Truck)		%Change in Truck AADT
		No Build	Build		No Build	Build	
Freeway Mainline							
Eastbound SR-91							
Under Green River Road Overcrossing	HOV/HOT	44,183	47,364	7.2	0 (0)	0 (0)	0.0
	GP	101,876	109,377	7.4	7,131 (7)	7,656 (7)	7.4
Between Green River Road On-Ramp and SR-71 Northbound Off-Ramp	HOV/HOT	44,183	- ^a	N/A	0 (0)	- ^a	N/A
	GP	107,120	- ^a	N/A	7,498 (7)	- ^a	N/A
Between SR-71 Northbound Off-Ramp and Green River Road On-Ramp	HOV/HOT	- ^a	47,364	N/A	- ^a	0 (0)	N/A
	GP	- ^a	90,405	N/A	- ^a	6,328 (7)	N/A
Upstream of On-Ramp from SR-71 Southbound	HOV/HOT	44,183	47,364	7.2	0 (0)	0 (0)	N/A
	GP	82,945	89,042	7.4	5,806 (7)	6,233 (7)	7.4
Northbound SR-71:							
North of SR-91 Westbound On-Ramp	GP	60,668	63,919	5.4	4,247 (7)	4,474 (7)	5.4

Roadway Segment	Lane Type or Direction	AADT - All		% Change	Truck AADT (%Truck)		%Change in Truck AADT
		No Build	Build		No Build	Build	
Southbound SR-71:							
North of SR-91 Westbound Off-Ramp	GP	59,928	62,293	3.9	4,195 (7)	4,360 (7)	3.9
Ramps							
Eastbound SR-91 Off-Ramp to Green River Road		18,931	20,336	7.4	1,325 (7)	1,423 (7)	7.4
Eastbound SR-91 On-Ramp from Green River Road		5,245	- ^a	N/A	367 (7)		N/A
Eastbound SR-91 On-Ramp/Northbound SR-71 On-Ramp from Green River Road		- ^a	6,901	N/A	- ^a	483 (7)	N/A
Eastbound SR-91 Off-Ramp to Northbound SR-71		17,312	18,972	9.6	1,212 (7)	1,328 (7)	9.6
Westbound SR-91 Off-Ramp to Northbound SR-71 On-Ramp		35,285	37,669	6.8	2,470 (7)	2,637 (7)	6.8
Westbound SR-91 Off-Ramp to Green River Road		7,315	8,498	16.2	512 (7)	595 (7)	16.2
Westbound SR-91 On-Ramp from Green River Road		20,467	20,731	1.3	1,433 (7)	1,451 (7)	1.3
a. Proposed new or replaced ramp. b. Truck percentages remain unchanged for Build and No Build scenarios. GP – general purpose lane; HOV/HOT – high occupancy vehicle lane/high occupancy toll lane; N/A – not applicable Source: Parsons 2010 Traffic Study; May 2018 traffic counts in the area; and PeMS 2018 data							
Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT							
NA – Project is a junction between two highways. The facility is not an interchange or intersection and the project does not propose any design changes to the intersections already in place. The geometric changes proposed by the project will not affect the capacity of the intersection.							
RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT							
NA – Project is a junction between two highways. The facility is not an interchange or intersection and the project does not propose any design changes to the intersections already in place. The geometric changes proposed by the project will not affect the capacity of the intersection.							
Describe potential traffic redistribution effects of congestion relief (impact on other facilities)							
Traffic redistribution effects of congestion relief have not changed since 2009: During construction of the project, some traffic delays can occur; however, the traffic impacts during construction are only temporary in nature and will cease upon completion of construction activities. The proposed project would have little effect on traffic redistribution on other transportation facilities; however, it will provide improvements in traffic flow within the project limits.							
Comments/Explanation/Details (attach additional sheets as necessary)							
The proposed project is intended to improve traffic flow and reduce congestion in the area. The project is not a traffic generator or capacity enhancing project. the proportion of heavy diesel truck volumes using the Freeways segments is estimated to be on the order 6-7% of total AADT; and it is presumed that these							

proportions of the total daily traffic demand would not change during the years after completion of construction through the RTP horizon year of 2045.

While the percent change in AADT and Truck AADT increases by 19.7% and 16.2% for the Opening Year and Horizon Year, respectively, the overall traffic numbers are small. Therefore, even small increases in traffic and truck volumes result in larger percentages increases. The overall increase in traffic and truck volumes (989 and 69 respectively for Opening Year and 1,183 and 83 respectively for the Horizon Year) are not substantial from an air quality impacts perspective.

Furthermore:

- the project does not include highway facility improvements to connect a highway to a major freight, bus, or intermodal terminal;
- the project would not affect a congested intersection that has a significant increase in the number of diesel trucks;
- the project would not involve a significant increase in the number of diesel transit buses or diesel trucks. Based on the information provided above, the proposed project is not expected to introduce significant amounts of diesel truck traffic, would not generate additional diesel truck traffic above levels anticipated without implementation of the project, and is in compliance with the SIP/RTIP. Therefore, the project qualifies for a finding of “Not POAQC” based on the definition contained in 40 CFR 93.123(b)(1).

The project is not a Project of Air Quality Concern (40 CFR 93.123(b)(1))

(i) New or expanded highway projects with significant number/increase in diesel vehicles?

- ✓ Not a new highway project
- ✓ Minor interchange improvements to relieve congestion (reducing delay and air pollutant emissions)
- ✓ No substantial change in traffic volumes or truck percentages on SR-91 or SR-71

(ii) Affects intersections at LOS D, E, or F with a significant number of diesel vehicles?

- ✓ Does not affect intersections

(iii) New bus and rail terminals and transfer points?—Not Applicable

(iv) Expanded bus and rail terminals and transfer points?—Not Applicable

(v) Affects areas identified in PM₁₀ or PM_{2.5} implementation plan as site of violation?

- ✓ Not identified in a PM₁₀ or PM_{2.5} implementation plan as an area of potential violation

See also Figures 1, 2 and 3 attached.

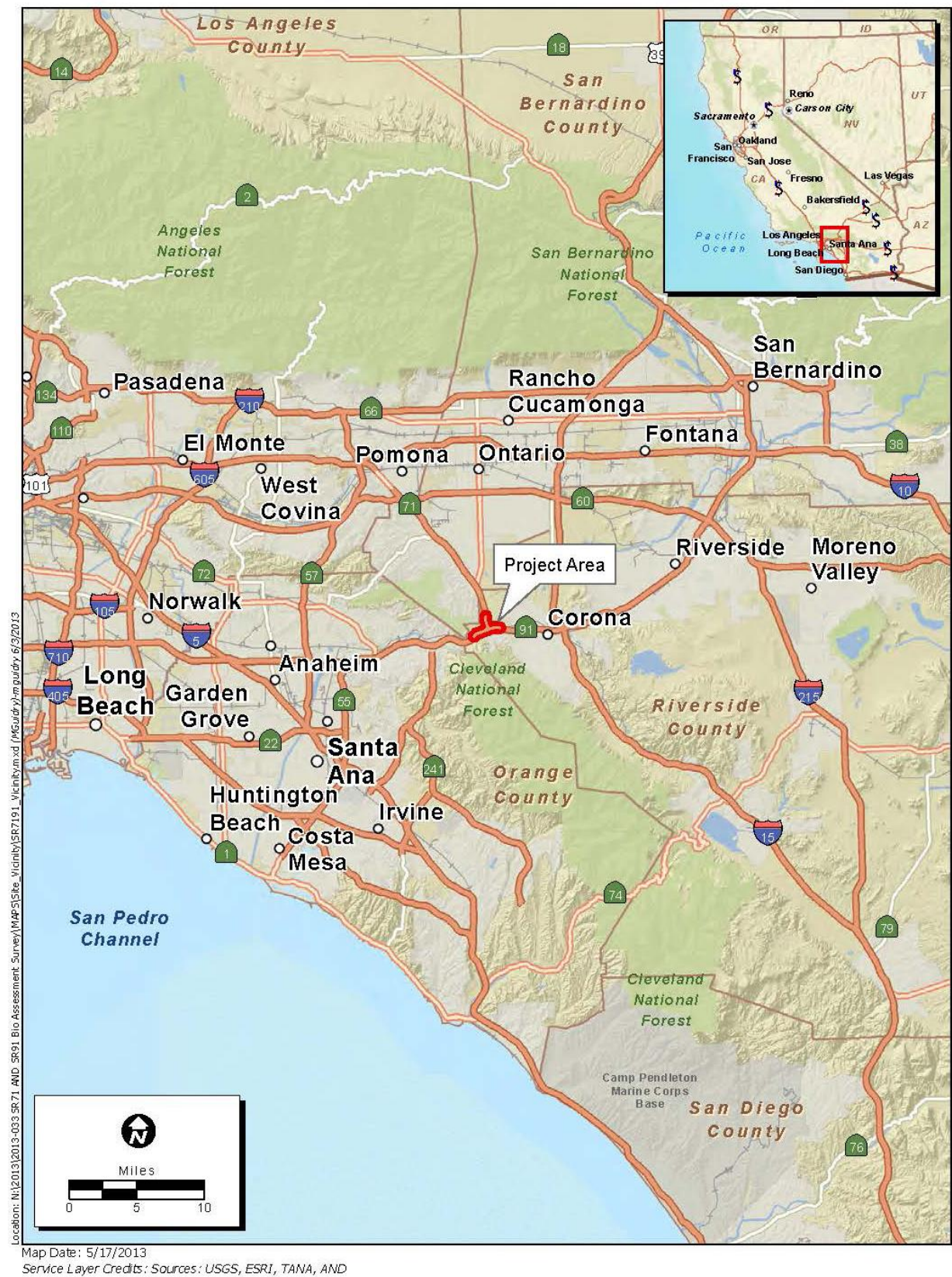


Figure 1 Project Location within the Region

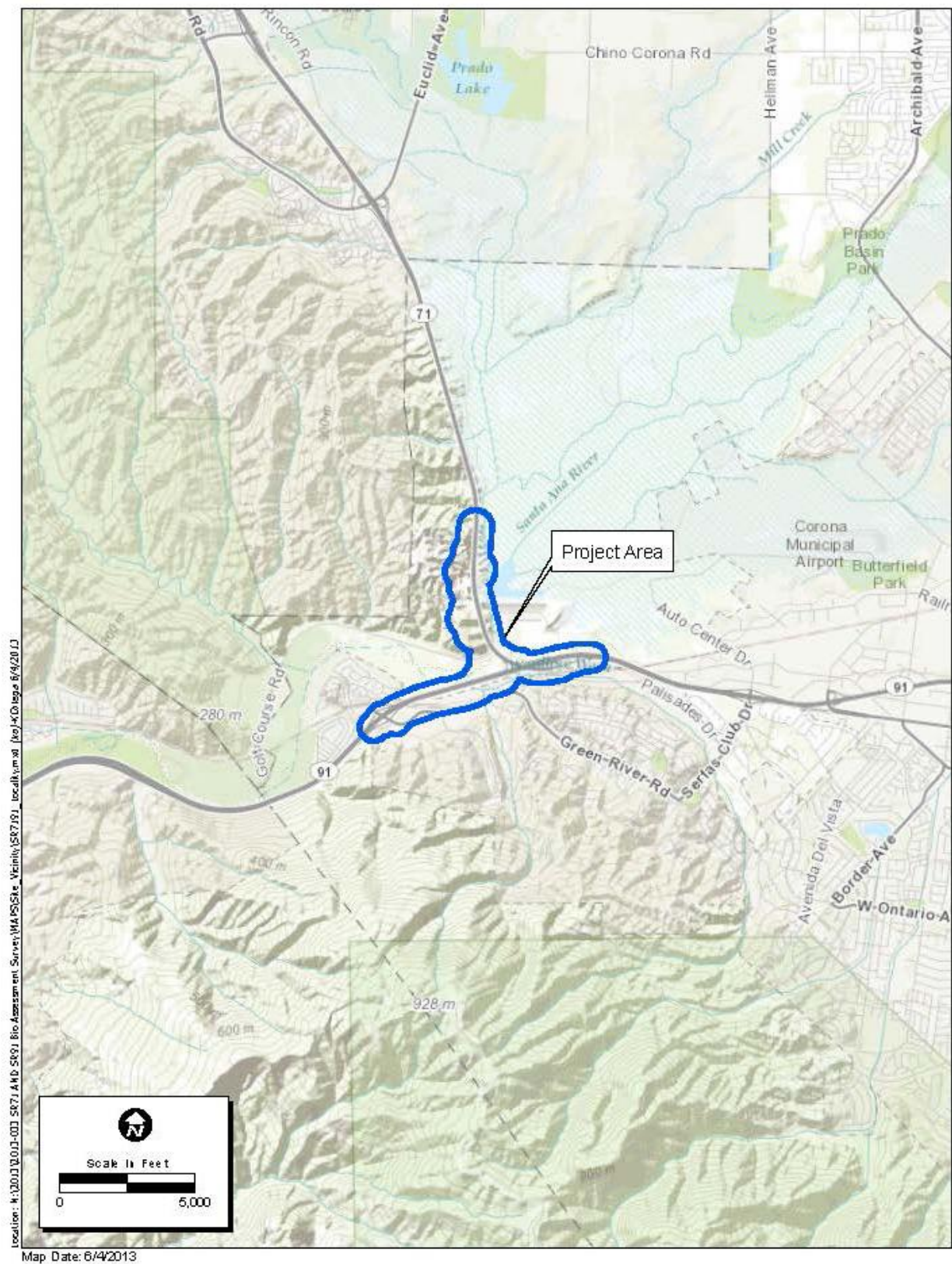


Figure 2 Project Location within the Vicinity

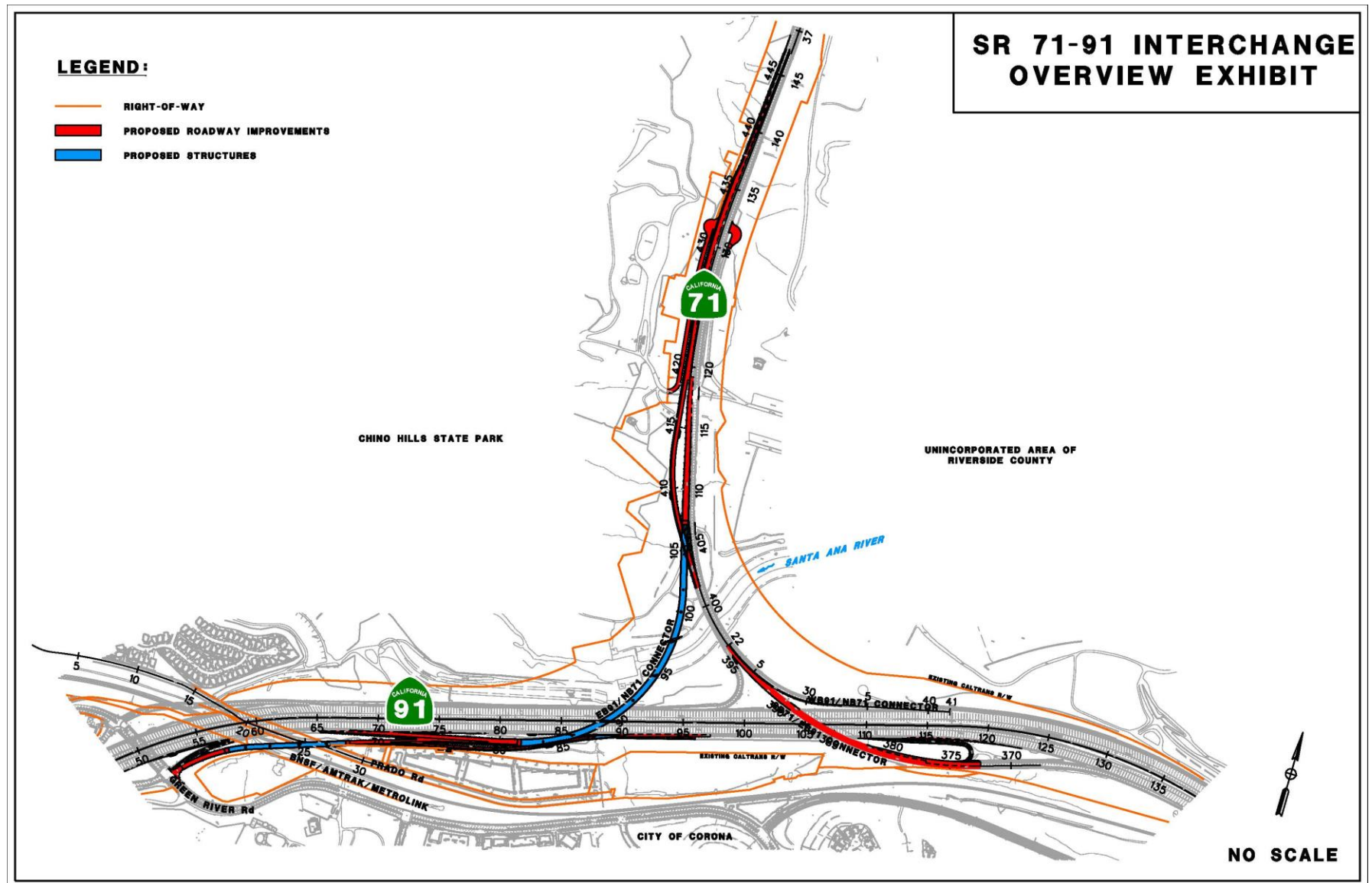


Figure 3 Project Alignment